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10/602,636	06/25/2003	Kyung-Shig Chung	1293.1757	1070

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
PHAM, THIERRY L	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/602,636	CHUNG ET AL.	
	Examiner	Art Unit	
	Thierry L. Pham	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

- This action is responsive to the following communication: an Amendment filed on 9/6/07.
- Claims 1-29 are currently pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsusaka et al (US 20020039508), and in view of Nakayama (US 5580041).

Regarding claim 1, Tsusaka discloses an image forming apparatus (fig. 1) comprising:

- a printing unit (fig. 1) which prints an image on paper;
- an exit member (rollers 31 & 32, fig. 1) to push the paper out of the image forming apparatus;
- an exit path (exit path 56, fig. 1) which connects an exit of the printing unit to an exit member which pushes the paper outside of the printing unit; and
- a plurality of guide members (guide members 61, fig. 1, par. 32) arranged widthwise (par. 32) of the paper, each guide member having a first guide side (fig. 1) to guide the paper coming out of the printing unit along the exit path, wherein when the first guide side is contacted by the paper coming out of the printing unit, and returns to an original position (par. 35-37) after the paper completely passes through the printing unit.

Tsusaka fails to teach and/or suggest each of the plurality of guide members rotate and balance themselves with a force applied by the paper.

Nakyama, in the same field of endeavor for image forming apparatus (col. 1, lines 10-12), teaches a well-known example each of the plurality of guide members (guide member 20, fig. 4-5) rotate and balance themselves with a force applied by the paper (the guide member balances and rotates with the weight of printed paper received, col. 4, lines 26-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify image forming apparatus of Tsusaka to include guide members as taught by Nakyama so that the printed paper discharged can be stacked evenly on the base table (col. 4, lines 60-67).

Therefore, it would have been obvious to combine Tsusaka with Nakyama to obtain the invention as specified in claim 1.

Regarding claim 2, Tsusaka further discloses the apparatus of claim 1, further comprising a reverse path (reverse path, par. 35-37) which branches out of the exit path between the exit of the printing unit and the exit member, so that the direction of the movement of the paper, which moves backward (moves backward, abstract and par. 35-37) along the exit path, is reversed and again supplied into the printing unit when the exit member rotates in a reverse direction, wherein each guide member further comprises a second guide side which guides the paper, which goes backward along the exit path, along the reverse path.

Regarding claim 3, Tsusaka further discloses the apparatus of claim 2, further comprising a plurality of auxiliary guide members (ref. 34, fig. 1) between the guide members, each auxiliary guide member including a first side and a second side, the first side being more distant from the rear side of paper than the first guide side and the second side being lower than the second guide side.

Regarding claim 4, Tsusaka further discloses the apparatus of claim 1, wherein the guide members (par. 46) pivot independently from one another.

Regarding claim 5, Tsusaka further discloses the apparatus of claim 1, wherein the guide members pivot together (fig. 2).

Regarding claim 6, Tsusaka further discloses the apparatus of claim 1, further comprising first stoppers (guide member stoppers 63, fig. 1) formed in the same direction as the pivoting

direction of the guide members and respectively contact the guide members to be a predetermined distance away from the guide members.

Regarding claim 7, Tsusaka further discloses the apparatus of claim 1, further comprising second stoppers (guide member stoppers 63, fig. 1) which control the extent of the pivoting action of the guide members so that the guide members do not pivot beyond the original positions when the guide members return to the original positions thereof.

Regarding claim 8, Tsusaka further discloses the apparatus of claim 1, wherein the guide members return to the original positions thereof due to own weights thereof when the paper passes by the guide members.

Regarding claim 9, Tsusaka further discloses the apparatus of claim 1, further comprising elastic members (par. 28) which apply elastic force to the guide members to make the guide members return to the original positions thereof.

Regarding claim 10, Tsusaka further discloses the apparatus of claim 1, further comprising a plurality of auxiliary guide members (ref. 34, fig. 1) between the guide members, each auxiliary guide member including a first side more distant from the rear surface of paper than the first guide side.

Regarding claim 11, Tsusaka further discloses the apparatus of claim 2, further comprising: a first frame (frame 60, fig. 1) on which the plurality of guide members are movably connected; and a second frame positioned adjacent to a side of the first frame opposite to the plurality of guide members and forming a reverse path with the first frame.

Regarding claim 12, Tsusaka further discloses the apparatus of claim 11, further comprising: a feed roller (feed roller 7, fig. 1) positioned at the end of the reverse path to received the paper from the reverse path and feed the paper toward the printing unit to print an image on the reverse side thereof.

Regarding claim 13, Tsusaka further discloses the apparatus of claim 2, wherein the plurality of guide members further comprise as second guide side to guide paper towards the reverse path (reverse path, par. 35-37).

Regarding claim 14, Tsusaka further discloses the apparatus of claim 1, wherein the first guide side has a shape (fig. 1 & 3) of a straight line.

Regarding claim 15, Tsusaka further discloses the apparatus of claim 1, wherein the first guide side has a shape of a slight curve (curve, fig. 3) to direct the paper toward the exit member.

Regarding claim 16, Tsusaka further discloses the apparatus of claim 13, wherein the second guide sides (ref. 70, fig. 2) of the respective guide members are slightly higher than an upper surface of the first frame.

Regarding claim 17, Tsusaka further discloses the apparatus of claim 11, further comprising plural pairs (joints, fig. 1 & 2) of combiners attached to the first frame, each pair of combiners movably connecting the respective guide member to the first frame.

Regarding claim 18, Tsusaka further discloses the apparatus of claim 17, wherein the plural guide members each comprise axes (fig. 1) formed at both surfaces thereof to engage with a respective combiner to movable attach the plural guide member to the first frame.

Regarding claim 19, Tsusaka further discloses the apparatus of claim 18, wherein there are five guide members (fig. 1) connected with the first frame.

Regarding claim 20, Tsusaka further discloses the apparatus of claim 13, wherein the second guide side or each guide member extends (extends, fig. 2) from an end of the first frame toward the reverse path.

Regarding claim 21, Tsusaka further discloses the apparatus of claim 20, further comprising recessed portions (ref. 64, fig. 2) aligned with respective guide members and formed at end of the first frame such that movement of the second sides of the guide members are not restricted by the end of the first frame.

Regarding claim 22, Tsusaka further discloses the apparatus of claim 10, wherein the auxiliary guide members are formed as ribs of the first frame (fig. 2).

Regarding claim 23, Tsusaka further discloses the apparatus of claim 22, wherein each of the ribs comprises: a first rib side positioned more distant from the rear surface of the paper than the first guide side to guide the paper in the forward path; and a second rib side positioned lower than the second guide side to guide the paper in the reverse path (64A & 64B, fig. 2).

Regarding claim 24, Tsusaka further discloses the apparatus of claim 21, wherein the guide members are formed to pivot towards (fig. 2) the first frame.

Regarding claim 25, Tsusaka further discloses the apparatus of claim 24, wherein the guide members have a center of gravity off center (fig. 2).

Regarding claim 26, Tsusaka further discloses the apparatus of claim 1, further comprising tension coil springs (spring, par. 18) each connected to a respective guide member and the first frame to force the guide members to pivot slightly when contacted by the paper and then return to an original position.

Regarding claim 27, Tsusaka further discloses the apparatus of claim 20, further comprising first stoppers (fig. 2) formed at end of the first frame such that movement of the second sides of the guide members are not restricted by the end of the first frame.

Regarding claim 28, Tsusaka further discloses the apparatus of claim 21, further comprising second stoppers (fig. 2) to prevent the guide members from excessively moving beyond the original position when returning thereto.

Regarding claim 29 recites limitations that are similar and in the same scope of invention as to those in claim 1 above; therefore, claims 29 is rejected for the same rejection rationale/basis as described in claim 1.

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection (via newly found prior art reference) due to newly added features/limitations ("each of the plurality of guide members rotate and balance themselves with a force applied by the paper") as cited in independent claims 1 & 29.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thierry L. Pham

GABRIEL GARCIA
PRIMARY EXAMINER